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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,239	03/25/2005	Kang Mo Choi	9988.219.00	2549

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WASHINGTON, DC 20006

EXAMINER

REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/529,239

Applicant(s)

CHOI ET AL.

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 31-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- Claims 31-35 are withdrawn (see below).
- Claims 1-35 are pending.

Election/Restrictions

[1] Claims 31-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant's election without traverse of Claims 31-35 in the reply filed on 12/6/2006 is acknowledged.

Drawings

[2] Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

[3] Claims 23-24 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 3-4. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP

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§ 706.03(k). Examiner also notes that said objection may be resolved by a change in the proper dependency of said claims.

Claim Objections

[4] Claims 28 and 30 recite the limitation "the rim" in the instant claim. There is insufficient antecedent basis for this limitation in the instant claims or dependent ones therefrom.

Claims 21 and 29 recite the limitations "the upper part" and "the lower part" in the instant claims. There is insufficient antecedent basis for these limitations in the instant claims or dependent ones therefrom.

Claims 26-28 and 30 recite the limitation "the extension member" in the instant claim or dependent one therefrom. There is insufficient antecedent basis for this limitation in the instant claims or dependent ones therefrom.

Claim 30 recites the limitations "the coupling portion" in the instant claim or dependent one therefrom. There is insufficient antecedent basis for these limitations in the instant claim or dependent ones therefrom.

Claim Rejections - 35 USC § 102

[5] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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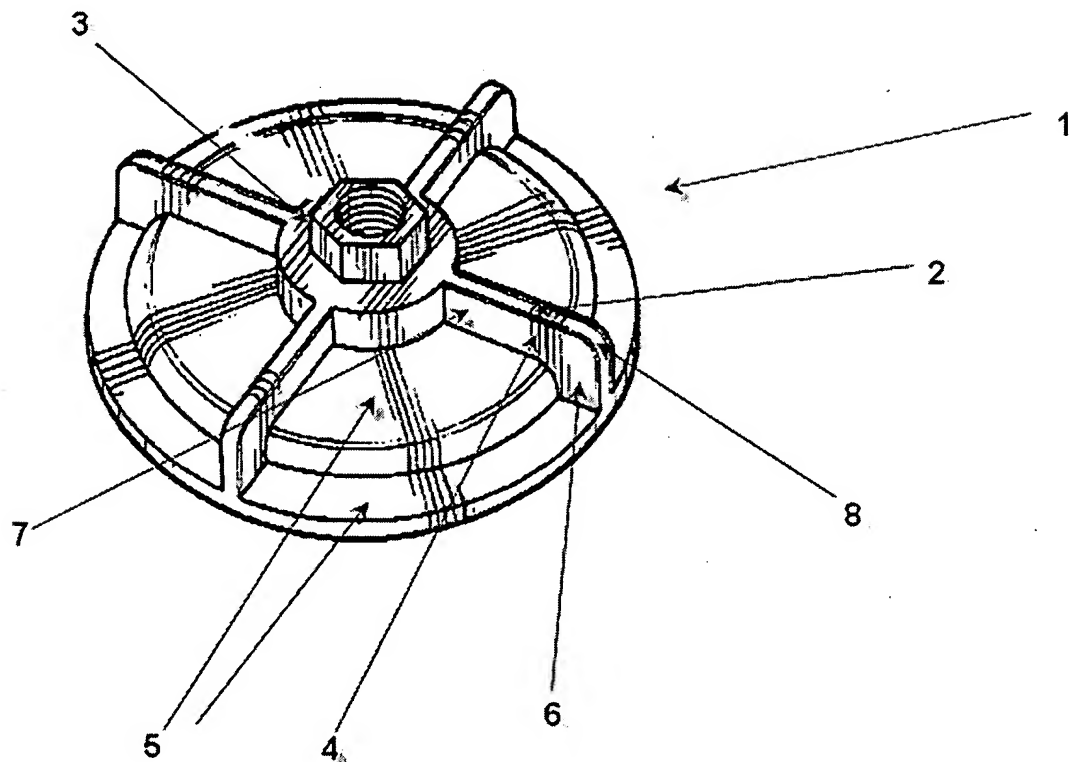
subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[6] Claims 1-21 and 23-25 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Nelson, US-D427,053, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of Nelson is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 1, Nelson discloses of a lock nut (1) (see figure below) [for a leg assembly of electric home appliances], comprising:

a plurality of ribs (2) extending in a radius direction from a circumference of a hub (3), and having a side (4) over which [a tool or finger for rotating the hub about the leg bolt]; and a supplementary member (5) provided [allowing the wrench or finger to access from the radius direction of the hub (3) to the side (4)], and coupling the ribs (2).



The above statement in brackets is an example of intended use, with the prior art only needing to be capable of performing said function to be anticipatory towards that of the prior art, and in the instant case, the lock nut as presented by Nelson is indeed capable of being used for a leg assembly of electric home appliances, as well as having a tool or finger access said nut (at the locations as claimed above) for rotating the hub. Note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

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Re: Claim 2, wherein the height of the rib (2) is same as or lower than that of the hub (3), and the height of the supplementary member (5) is lower than that of the rib (2).

Re: Claim 3, wherein the side (4) is perpendicular to a horizontal plane.

Re: Claim 4, wherein the side (4) is inclined to a perpendicular line.

Re: Claim 5, wherein at least one of both sides of the rib (2) gets larger (6 compared with 7) from the hub (3) toward an end to the rib (2).

Re: Claim 6, wherein an end portion and both sides of the rib (2) are geared to the [tool when the tool accessed from the radius direction of the hub (3)].

Re: Claim 7, wherein the supplementary member (5) comprises an extension member (5) extended from a circumference of the hub (3) to a space between the ribs (2).

Re: Claim 8, wherein the side (4) is inclined to a perpendicular line.

Re: Claim 9, where a first side of both sides of the rib (2) is inclined so as to be gradually thickened (6 compared with 7) from an upper part of the rib (2) to the extension member (5), and a second side (adjacent 4, the other side) thereof is inclined such that it get thicker from a lower part of the rib (6 compared with 7) to the extension member (5).

Re: Claim 10, wherein the extension member (5) is extended from a center of a height direction of the hub (3), and has a lower height than the rib (2).

Re: Claim 11, wherein the extension member (5) is inclined [such that the tool or finger accessed from the radius direction of the hub (3) easily touches the side].

Re: Claim 12, wherein the extension member (5) is inclined such that a first end (inner 5) of thereof of being coupled with the hub (3) is higher than a second end (outer 5) thereof being adjacent to the end portion of the rib (2).

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Re: Claim 13, wherein the incline direction of two extensions (5) located at both sides (4, and adjacent 4, the other side) of the rib (2) is different from each other.

Re: Claim 14, wherein an end portion of the extension (5) is provided to be adjacent to a lower part or upper part of the end portion of the rib (2) such that a single exposed area of a portion being adjacent to the end portion of the rib on the sides becomes larger (see outer 5 compared with inner 5).

Re: Claim 15, wherein a center portion of the end portion of the extension member (outer 5) is curved toward the hub (3).

Re: Claim 16, wherein an end portion of the rib (2) forms a corner of the lock nut (1).

Re: Claim 17, wherein an end portion of the rib (2) is rounded (8).

Re: Claim 18, wherein the supplementary member (5) comprises a rim (outer 5) for coupling the end portion of the ribs (2).

Re: Claim 19, wherein the rim (outer 5) is lower than the rib (2) and coupled with an upper or lower part of the rib (2).

Re: Claim 20, wherein the rim (outer 5) is provided to be perpendicular to a horizontal plane.

Re: Claim 21, wherein one (outer 5) of two rims (inner and outer 5) located both sides of the end portion of the rib (2) is coupled with the upper part of the rib (2), and the other rim (inner 5) is coupled with the lower part thereof.

Re: Claim 23, wherein the side (4) is perpendicular to a horizontal plane.

Re: Claim 24, wherein the side (4) is inclined to a perpendicular line.

Re: Claim 25, where a first side of both sides of the rib (2) is inclined such that it gets thicker (6 compared with 7) from an upper part of the rib (2) to the extension member (5), and a second side (adjacent 4, the other side) thereof is inclined such that it get thicker from a lower part of the rib (6 compared with 7) to the extension member (5).

Claim Rejections - 35 USC § 103

[7] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[8] Claims 22 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, US-D427,053, in view of Johnson, US-3,868,079.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 22, Nelson discloses that from the above claims.

The difference between the claim and Nelson is that Nelson does not expressly state that the locking nut is used in conjunction with a leg bolt coupled with an electric home appliance. First, it is extremely obvious and apparent to one skilled in the art of fasteners of the diverse functionality of locking nuts. The use of locking nuts for a variety of applications including that of with home appliances is widely held and understood to those in the art. To show the use of a

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nut in conjunction with a leg bolt coupled with an electric home appliance the examiner submits the reference of Johnson. Johnson discloses a threaded locking nut attached to a leg bolt of a home appliance, specifically a washing machine. Thus, it would have obvious to one skilled in the art to have used the locking nut as provided by Nelson with numerous applications, one of which being integral with a leg bolt coupled with a home appliance as shown by Johnson. One would want such a configuration so as to help deter inadvertent removal of the leg bolt and support the leg bolt during various movements while being attached to the washing machine assembly.

Re: Claim 26, Nelson discloses wherein the extension member (5) is inclined such that a first end (inner 5) of thereof of being coupled with the hub (3) is higher than a second end (outer 5) thereof being adjacent to the end portion of the rib (2).

Re: Claim 27, Nelson discloses wherein the incline direction of two extensions (5) located at both sides (4, and adjacent 4, the other side) of the rib (2) is different from each other.

Re: Claim 28, Nelson discloses wherein the rim (outer 5) is perpendicularly extended from the end of the extension member (inner 5) to an upper part or lower part of the rim (2).

Re: Claim 29, Nelson discloses wherein one (outer 5) of two rims (inner and outer 5) located both sides of the end portion of the rib (2) is coupled with the upper part of the rib (2), and the other rim (inner 5) is coupled with the lower part thereof.

Re: Claim 30, Nelson discloses wherein the coupling portion of the rib (2), the extension member (5), and the rim (outer 5) is rounded (8).

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Conclusion

[9] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of nut; as well as their extreme relevance to the current application as many read extensively onto the claimed invention: please see submitted notice of reference cited.

[10] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCR


2/28/07

David Reese
Assistant Examiner
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PRIMARY EXAMINER